From: Jay Field

Eric Blischke/R10/USEPA/US@EPA To:

Burt Shephard/R10/USEPA/US@EPA; Chip Humphrey/R10/USEPA/US@EPA; Joe Goulet/R10/USEPA/US@EPA; Cc:

rgensemer@parametrix.com; Robert Neely; Benjamin Shorr

Subject: Re: Bioassay Interpretation at Portland Harbor

Date: 06/12/2009 04:16 PM Attachments: PH ToxRef 090612.xls

Eric, Attached is a spreadsheet that shows the data we have for the 293 tox samples and the calculated effect levels, which were based on the values for the 4 endpoints in table RE-2. As previously mentioned, we did not take into account statistical significance, since it was our understanding that statistical comparisons are not part of the reference envelope approach as described by MacDonald & Landrum.

Have we received any of the information that you requested from ${\tt John}$ ${\tt Toll}$ and ${\tt LWG?}$

Have a good weekend,

Jay

Blischke.Eric@epamail.epa.gov wrote:
> All, I had another voicemail exchange with John, he would like to have
> this discussion next Tuesday, June 16th. Does that work? I will
> continue to work on getting some information ahead of time.

Shephard/R10/USE PA/US

Eric Blischke/R10/USEPA/US@EPA

06/08/2009 11:44

Chip Humphrey/R10/USEPA/US@EPA, jay.field@noaa.gov, Joe Goulet/R10/USEPA/US@EPA, rgensemer@parametrix.com

Re: Bioassay Interpretation at Portland Harbor(Document link: Eric Blischke)

> Eric,

> I think Jay's suggestion is a good one, we need to know exactly what LWG > has done before we can identify the discrepancies. For now, we don't > know what they've done that differs from us. I also think we should > bring Don MacDonald into the discussions with LWG.

> Surprisingly given my schedule since January, I'm actually in the office > all week this week, although most of Wednesday is tied up with Upper > Columbia River site meetings.

> Best regards,

> Burt Shephard

Risk Evaluation Unit

> Telephone: (206) 553-6359 > Fax: (206) 553-0119

> e-mail: Shephard.Burt@epa.gov

"If your experiment needs statistics to analyze the results, then you

Eric Blischke/R10/USE

PA/US

Burt Shephard/R10/USEPA/US@EPA, 06/08/2009 10:35 rgensemer@parametrix.com, Joe Goulet/R10/USEPA/US@EPA, jay.field@noaa.gov

Chip Humphrey/R10/USEPA/US@EPA cc

Portland Harbor

At the AOPC meeting, it became apparent that our interpretation of the sediment bioassay results did not match the LWG's interpretation. I am interested in understanding the basis for this discrepancy. Based on my review of the data, the bioassay results match up with the bins that we established in Table RE-2 in our March 31, 2009 direction to LWG (see previous email). Last week, I put in a call to John Toll to try to understand the LWG's interpretation. Although I did not speak directly with John, he left me a voice mail that described 3 possibilities for the discrepancy:

1) The raw response rates differ slightly - e.g., 15% vs. 17%. John does not know why this is the case.

2) Significance Testing. The LWG used the biostats software. He indicated that this is a complicated procedure but that the LWG followed the decision tree associated with the software package and did not make any choices that were inconsistent with the decision tree.

3) The calculation of the level of the hit (e.g., low, moderate or severe toxicity) based on a comparison to the reference envelope was based on an added 10% to the reference envelop opposed to multiplying by the reference envelope value by 1.1 or 1.2.

I would like to set up a time to discuss this sometime this week.
Please let me know when you might be available. I will work with John to hopefully have some information that we can use to focus the discussion.

Thanks, Eric,

Thanks, Eric,

1 Thanks, Eric,

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